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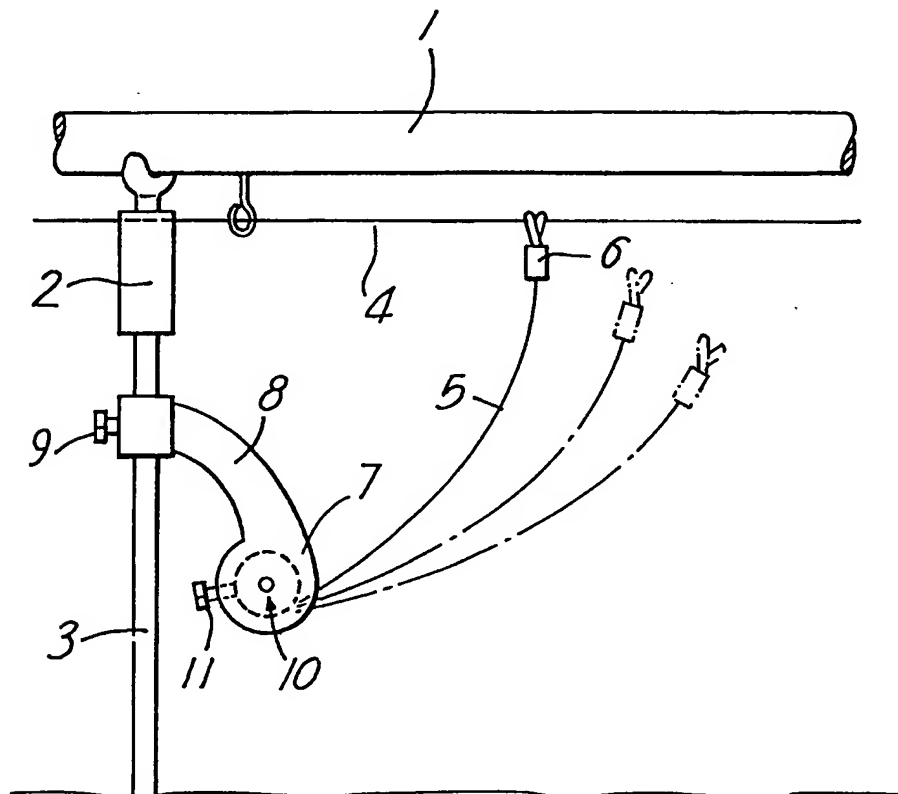
US 4660316 A

(58) Field of search

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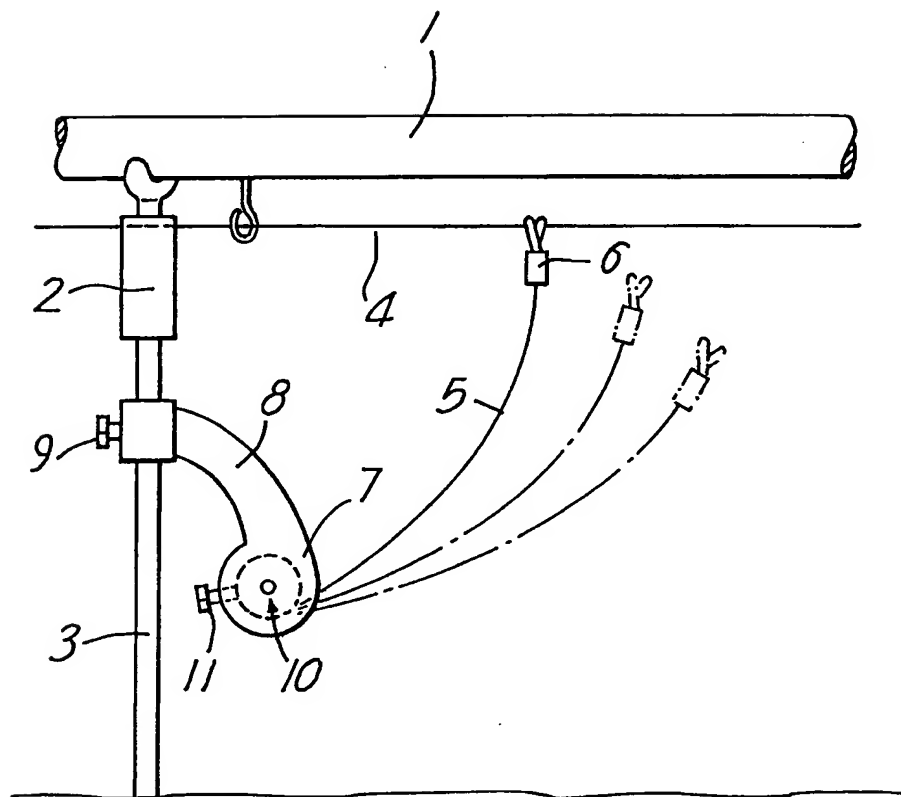
(54) Bite Indicator for fishing lines

(57) A bite indicator for use by anglers comprises a spring arm 5 mounted on a fixed member 7 and clipped to the fishing line 4. A bite is indicated by movement of the spring arm. Tension in the spring arm is adjustable.



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BITE INDICATOR FOR FISHING LINES

This invention relates to a bite indicator for use by anglers.

Bite indicators are used by anglers to indicate to the angler
5 that a fish has taken the bait, when using a rod support for holding
the rod during fishing, rather than when fishing with a hand held rod.
Such devices are more especially used when angling for big fish such as
carp. Two different types of bite indicator are in common use, one of
which gives an audible signal and the other of which gives a visual
10 signal, with both types of indicator often being used in tandem.

The audible type of bite indicator comprises a sensor which
senses the movement of the line when the fish takes the bait and moves
away taking the hook with it and causing more line to run off the reel.
As the line runs out the sensor senses that movement and issues an
15 audible signal to alert the angler that a strike has been made. Of
course, if the fish, after taking the hook, swims towards the bank, no
extra line will be run off the reel, and no signal occurs.

The other type is gravity operated and comprises an indicator
weight slidably mounted on a vertical rod, or mounted on a pivotable
20 arm, and which in use rests on, or is suspended from the line
immediately below the rod thereby causing the line to sag at that
point. As the tension in the line changes following a strike, the
indicator weight will move up or down to indicate that a strike has
been made.

25 In accordance with the present invention a novel type of bite
indicator is provided comprising a resilient arm of spring steel strip
or other suitable material provided at one end with a mounting means
for mounting the bite indicator in a fixed position on, for example,
the rod rest or support or other fixed member. At its free end the
30 spring arm is provided with a gripping means for engaging and gripping
the line. To set the indicator the line is cast and the rod set in
position in the rest. The free end of the spring arm of the bite
indicator is attached to the line, and the line run out another few
centimetres, thus tensioning the indicator arm into an arcuate
35 configuration and in which configuration it will be held by the tension
in the line. When a strike is made, and depending upon which way the
fish swims, the indicator arm will either straighten, if the fish swims

towards the bank and tension in the line slackens, or will bend even more, if the fish swims away taking more line with it.

In a preferred arrangement a fixed stop member is provided to limit the flexing of the indicator arm, so that when the indicator arm hits the stop the line, which is firmly gripped by the gripping means at the end of the indicator arm, will stop running out, with the indicator arm then in a position of maximum flex. In any event, the relaxation or flexing of the spring arm will indicate to the angler that a strike has been made.

Preferably, the device also includes a movement sensor to sense movement of the spring arm away from its set position, and operable to actuate an audible alarm, thereby to give the angler both visual and audible signals indicating that a strike has been made.

The concept of the present invention is further described with reference to the accompanying drawings.

Referring to the drawings, this shows the butt (1) of a fishing rod resting on an optonic sensor (2) of known kind mounted on a spike (3) driven into the ground to serve as a rest for the rod whilst fishing. In known manner the fishing line (4) passes through the sensor (2) which will emit an audible signal as the line runs out following a strike.

In accordance with the present invention, a visual strike indicator is provided which may be used in addition to or instead of the optonic sensor. This visual strike indicator comprises a spring arm (5) provided at its free end with a clip (6) by means of which it may be clipped to the line (4), thereby to tension the spring arm (5) into an arc whilst fishing, the arm being held in that arc by virtue of the tension in the line. When a fish strikes, that arm will move one way or the other depending upon which way the fish swims after the strike, towards or away from the rod, thereby to indicate visually that a strike has been made.

At its fixed end, the spring arm (5) is mounted in a housing (7) which in turn is mounted on a suitable fixed support, e.g. the spike (3), by means of a bracket (8) clamped to the spike (3) below the optonic sensor (2) by a screw knob (9).

In a preferred embodiment, the fixed end of the spring arm is secured to a cam member (10) mounted in the housing (7) and by means of

which the angle of the spring arm relative to the housing can be adjusted and then secured by the locking screw (11). In that way, the tension in the spring arm can be adjusted and the radius of curvature of the tensioned arm when clipped to the line (4) by the clip (6).

5 Desirably also the housing (7) will incorporate a sensor to sense any movement of the spring arm (5) following a strike and coupled to an audible alarm which emits an audible signal when a strike is made as well as providing a visual indication by movement of the spring arm. Thus a separate optonic sensor becomes unnecessary.

10 If desired, a fixed stop can be provided to limit the forward movement of the spring arm and to stop any further line being drawn off the reel.

CLAIMS

1. A bite indicator for use by anglers when angling with a fixed rod mounted in a rod rest or support, the bite indicator comprising a mounting member for mounting the indicator in a fixed position on a support, a spring arm attached at one end to the mounting member, and a clamping means located at the free end of the spring arm for attaching the free end of the spring arm to and gripping the fishing line, thereby to tension the spring arm into an initial bowed configuration during fishing, the bowed spring arm, in the event of a strike, either straightening or bending still further, depending upon the direction of movement of the fish, and thereby to give a visual indication that a strike has been made.
2. A bite indicator according to claim 1, including means for sensing movement of the spring arm in the event of a strike and means for emitting an audible signal in response to the sensing of that movement by the movement sensor.

Patents Act 1977
Examiner's report to the Comptroller under
Section 17 (The Search Report)

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Relevant Technical fields

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(ii) Int Cl (Edition 5) A01K

Search Examiner

R F PHAROAH

Databases (see over)

(i) UK Patent Office

(ii)

Date of Search

18 JANUARY 1993

Documents considered relevant following a search in respect of claims 1, 2

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	US 4660316 (B W GAMELIN) see column 5, lines 37-56	1

Category	Identity of document and relevant passages	Relevant to claim(s).

Categories of documents

X: Document indicating lack of novelty or of inventive step.

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